Preliminary summary of ozone exceedance on June 27, 2016

The 8-hour NAAQS for ozone (70 parts per billion, ppb) was exceeded at the Palo Verde, Walter Johnson and Joe Neal sites in the west and northwestern Las Vegas valley on June 27, 2016. The highest 8-hour average was 74 ppb at the Joe Neal site. Ozone levels were close to the NAAQS at other stations in the DAQ network.

The high ozone levels were partly due to wildfire smoke originating in southern California (possibly the Erskine Fire) and the Lovell Canyon Fire 25 miles west of Las Vegas. The weather conditions were fair with few high clouds and light wind speeds and variable directions through most of the day. Stronger southerly winds beginning in the evening quickly reduced ozone levels to seasonal levels for the evening hours, in the 40 to 50 ppb range.

As with conditions during the preceding few days that included some exceedances, the regional air mass included high-pressure ridge weather pattern producing abundant sunshine and low wind speeds, with daytime airflow generally from the southeast across the valley toward the northwest. This pattern caused strong ozone generation with little dilution producing the elevated concentrations.

The seasonal ozone advisory in place served to warn the public that such conditions may occur. An advisory for ozone and smoke related to wildfires issued the previous week covered this day too. The air quality forecast issued included UNH-SG (Unhealthy for Sensitive Groups) levels occurring on this day.